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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/771,062	01/29/2001	Adrian P. Wise	94100414(EP)USC1X1C1D3 PD	8453
22887	7590	09/09/2005	EXAMINER NGUYEN, DUSTIN	
DISCOVISION ASSOCIATES INTELLECTUAL PROPERTY DEVELOPMENT 2355 MAIN STREET, SUITE 200 IRVINE, CA 92614			ART UNIT 2154	PAPER NUMBER

DATE MAILED: 09/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/771,062

Applicant(s)

WISE ET AL.

Examiner

Dustin Nguyen

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2154

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 July 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. Claims 1 – 7 are presented for examination.

#### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvath et al. [ US Patent No 5,450,599 ], in view of Nukiyama [ US Patent No 4,658,354 ].

4. As per claim 1, Horvath discloses the invention substantially as claimed including a method of storing data, comprising:

receiving a sequence of data words of a first predetermined width [ col 1, lines 15-25 and lines 37-41; and col 9, lines 32-34 ] and different respective formats either serially or in parallel [ i.e. serial or sequential ] [ col 1, lines 15-19; col 1, lines 33-37; and col 10, lines 20-37 ];

splitting the data words of the received sequence to form new data words of a new sequence, the new data words having a second predetermined width [ col 6, lines 63-col 7, lines 3; and col 7, lines 62-col 8, lines 2 ];

packing the new data words consecutively in a token buffer of a second width without holes between the new data words [ col 8, lines 3-24 ]; and

unpacking the new data words to reproduce a new sequence of the new data words [ claim 14 ].

Horvath does not specifically disclose using said new data words in a pipeline, a portion of said new data words capable of being used to prepare said pipeline for processing at one or more stages.

Nukiyama discloses using said new data words in a pipeline [ i.e. various commands and new data are generated in each pipeline stage, and these generated commands and new data are transferred through a pipeline bus to the latch of the next stage to be processed ] [ col 3, lines 47-53; and col 6, lines 59-63 ], a portion of said new data words capable of being used to prepare said pipeline for processing at one or more stages [ i.e. arbitrary pipeline stage can be selected ] [ Figure 4; col 2, lines 35-43; and col 9, lines 10-25 ].

It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Horvath and Nukiyama because Nukiyama's teaching of selecting arbitrary pipeline stage would allow individual stage to independently process information [ Nukiyama, Abstract ].

5. As per claim 2, Horvath discloses writing a block of data from the token buffer to a random access memory device configured to store the words of the second width [ col 8, lines 11-14; and col 13, lines 17-18 ].

6. As per claim 3, Horvath discloses expanding out run length code in the new words [ col 6, lines 6-9; and col 7, lines 3-6 ].

7. As per claim 4, it is rejected for similar reasons as stated above in claim 1. Furthermore, Horvath discloses an inverse modeler, comprising:

a data unpacker to unpack data words received from an input terminal either serially or in parallel to a different length format [ i.e. serial or sequential ] [ col 1, lines 15-19; col 6, lines 63-col 7, lines 3; and col 7, lines 62-col 8, lines 2 ];

a data expander coupled to the data unpacker [ col 8, lines 3-24 ].

a data padder to pad data tokens received from the data expander [ col 4, lines 10-12 ].

8. Claims 5 – 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvath et al. [ US Patent No 5,450,599 ], in view of Nukiyama [ US Patent No 4,658,354 ], and further in view of Morrison et al. [ US Patent No 4,985,766 ].

9. As per claim 5, Horvath and Nukiyama do not specifically disclose the data expander expands out run length codes into runs of zero followed by a level in packed data. Morrison discloses the data expander expands out run length codes into runs of zero followed by a level in packed data [ col 7, lines 40-54 ]. It would have been obvious to a person skill in the art at the time the invention was made to combine the teaching of Horvath, Nukiyama and Morrison

because Morrison's teaching would the fullness of the output buffer may be used to determine the quantisation factor [ Morrison, col 1, lines 33-44 ].

10. As per claim 6, Morrison discloses the padder pads the last word of expanded tokens [ col 2, lines 32-35; and col 4, lines 13-15 ].

11. As per claim 7, Morrison discloses the data unpacker deletes data between a flush signal and a block end signal [ col 5, lines 1-47 ].

12. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

13. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dustin Nguyen whose telephone number is 571-272-3971. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Follansbee John can be reached on (571) 272-3964. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
JOHN FOLLANSBEE  
SUPERVISOR, PATENT EXAMINER  
TECHNICAL CENTER 2100

Dustin Nguyen  
Examiner  
Art Unit 2154